

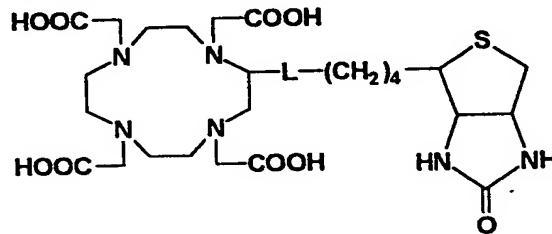
WHAT IS CLAIMED IS:

1. A method of increasing active agent localization at a target cell site of a mammalian recipient, which method comprises:

administering to the recipient a first conjugate comprising a targeting moiety and streptavidin;

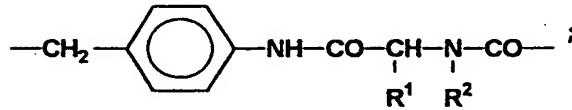
allowing an amount of time to pass that is sufficient for localization of the first conjugate to the target site;

subsequently administering to the recipient a second conjugate comprising an active agent and biotin, wherein the second conjugate localizes to target site-localized first conjugate, and wherein the second conjugate comprises a biotin-DOTA compound of the following formula:

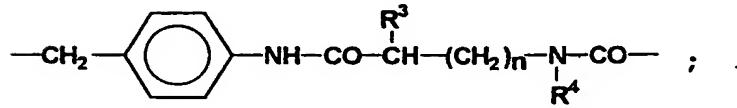


and further wherein a linker L is selected from the group comprising:

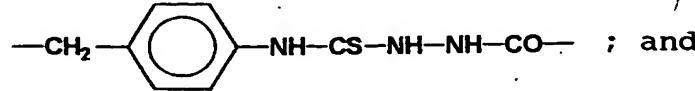
- 1) a D-amino acid-containing linker of the formula



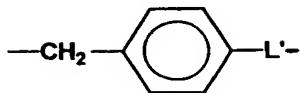
- 2) a linker of the formula



- 3) a linker of the formula



4) a linker of the formula

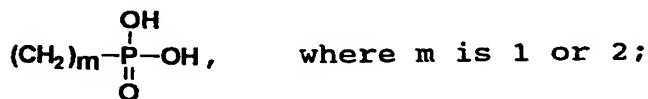


, wherein L' is selected from the group comprising:

- a) -NH-CO-(CH₂)_n-O- ;
- b) -NH- ;
- c) —NH-CO-CH₂-N⁺_{R'}-R''— ;
- d) -NH-CS-NH- ; and
- e) -NH-CO-(CH₂)_n-NH- ,

wherein R¹ is hydrogen, lower alkyl; lower alkyl substituted with one or more hydrophilic groups

including (CH₂)_m-OH, (CH₂)_m-OSO₃, (CH₂)_m-SO₃, and

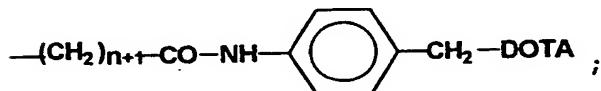


glucuronide-substituted amino acids; or other glucuronide derivatives;

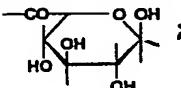
R² is hydrogen; lower alkyl; substituted lower alkyl having one or more substituents selected from the group comprising hydroxy, sulfate, and phosphonate; or a hydrophilic moiety;

R³ is hydrogen; an amine; a lower alkyl; a hydroxy-, sulfate- or phosphonate-substituted lower alkyl; a glucuronide; or a glucuronide-derivatized amino acid;

R⁴ is hydrogen, lower alkyl or



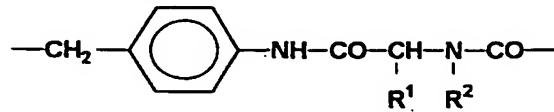
R' is hydrogen; -(CH₂)₂-OH or a sulfate or phosphonate derivative thereof; or



R'' is a bond or -(CH₂)_n-CO-NH- ; and

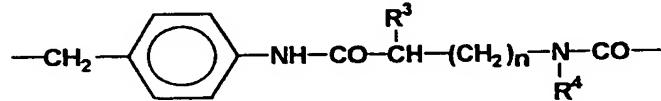
n ranges from 0-5.

2. A method of claim 1 wherein L is a D-amino acid-incorporating linker of the formula



3. A method of claim 2 wherein R^1 is CH_3 and R^2 is H.

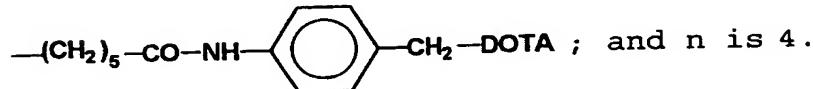
4. A method of claim 1 wherein L is a linker of the formula



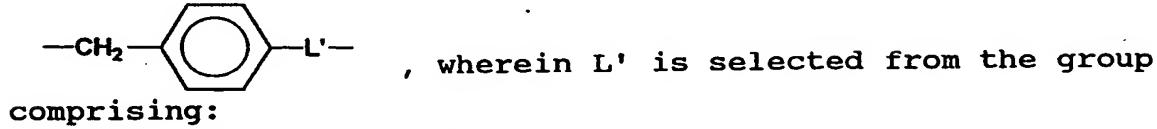
5. A method of claim 4 wherein R^3 is hydrogen; R^4 is CH_3 ; and n is 4.

6. A method of claim 4 wherein R^3 is hydrogen; R^4 is CH_3 ; and n is 0.

7. A method of claim 4 wherein R^3 is hydrogen; R^4 is



8. A method of claim 1 wherein L is a linker of the formula



a) $-\text{NH---CO---(CH}_2)_n\text{---O---}$;

b) $-\text{NH---}$;

c) $-\text{NH---CO---CH}_2\text{---N---R}''\text{---}$;

R'

d) $-\text{NH---CS---NH---}$; and

e) $-\text{NH---CO---(CH}_2)_n\text{---NH---}$ or a bis-DOTA derivative thereof.

9. A method of claim 1 wherein the first conjugate is administered at a substantially tumor saturating dose.

10. A method of claim 1 wherein the second conjugate is administered intraarterially or intralesionally.

11. A method of claim 10 wherein the second conjugate is administered via an artery supplying target tissue.

12. A method of claim 10 wherein the second conjugate is administered via an artery selected from the group consisting of hepatic artery, carotid artery, bronchial artery and renal artery.

13. A method of claim 1 wherein the second conjugate is administered intravenously.

14. A method of claim 1 wherein the targeting moiety is an oligonucleotide, a peptide, a polypeptide, a monoclonal antibody, a monovalent fragment thereof.

15. A method of claim 14 wherein the monoclonal antibody is a human, a humanized or a chimeric monoclonal antibody.